

REMARKS

Claims 1, 3, 6-9 and 11-15 remain pending. Reconsideration of the application is respectfully requested.

Applicants appreciate the courtesies extended by the Examiner during the telephone conference between the Examiner and Applicant's representative, Priscilla Morrison, on September 12, 2005. Claims 1 and 15, and Bazell et al. were discussed. Applicants pointed out that the distal tip and balloon distal skirt section of Bazell et al. do not have a portion which is both tapering distally and adhesively bonded to the shaft. Applicants agreed to identify advantages disclosed in Applicant's specification of the claimed embodiments of Applicant's invention.

The Examiner rejected claim 15 under 35 USC §103(a) as being unpatentable over Bazell et al. (USPN 3,884,242) alone, stating that the balloon 16 of Bazell et al. has a distal shaft section having an outer surface tapering distally (see distal portion of 16 in Fig. 3), and that Bazell et al. does not disclose that the distally tapering outer surfaces of the balloon distal shaft section and the distal tip member are aligned and taper at the same angle, but, however, it would have been obvious matter of design choice to modify the Bazell et al. reference, and to do so would be a mere change in the size or shape of a component.

However, the distal portion of balloon 16 in Bazell et al. Fig. 3 (i.e., immediately distal to bonded region 17) is transitioning from the larger diameter of the bonded region at 17 (along which the balloon 16 is bonded to the sealing ring 14 on the shaft) to the

smaller diameter of the shaft located distal to the sealing ring 14. As a result, the distal portion of 16 in Fig. 3 is spaced above the surface of the shaft, and is not itself bonded to the shaft. Thus, it is not a distal shaft section which has an outer surface tapering distally and which is adhesively bonded to the shaft, as required by Applicant's claim.

Modifying Bazell et al. to provide proximal flange portion 20 with a distal taper which is aligned and tapering at the same angle as the distal end of the balloon bonded thereto would not have been an obvious matter of design choice and is not a mere change in the size and shape of a component. Rather, it requires a change in the relationship of the tip and balloon relative to one another, and would appear to require a change in the structure of the underlying section of the shaft. Specifically, the taper angle of the distal portion of 16 in Fig. 3 is so large, it does not appear possible to modify the proximal flange portion of the distal tip member 19 to be aligned and tapering distally at the same angle without changing the diameter of the underlying section of the catheter shaft. Similarly, modifying the taper angle of the distal portion of 16 in Fig. 3 to make it a more gradual taper (e.g., to taper at the same angle as the distal section 23 of the distal tip member 19), would require a change in the length of the distal portion of 16 or a change in the diameter of the underlying section of the shaft, and thus requires more than a mere change in size or shape. Additionally, modifying Bazell et al. to change the taper direction of the flange 20, changes the way in which the distal tip meets up with the distal end of the balloon, and is counter to the explicit teaching of Bazell et al. that the flange

tapers proximally or has no taper, and changes the profile of the distally leading tip of the device. Therefore, merely changing the size or shape of the distal flange portion would not provide a distal tip aligned and tapering distally at the same angle and the balloon distal shaft section.

As discussed in Applicant's specification at paragraph [0006], Applicant's invention balances the strength of the connection between the soft tip and the catheter shaft with the need to minimize the stiffness of the distal end of the catheter, and minimizing the stiffness of the distal end of the catheter results in improved maneuverability of the catheter.

The Examiner rejected claims 1, 3, 4, and 11-14 under 35 USC §103(a) as being unpatentable over Bazell et al. in view of Inoue (USPN 5,100,386), stating, in the Response to Arguments section, that the distal portion (23) of Bazell et al. has an inwardly tapering (i.e., tapering distally) profile, and the proximal-most end includes the proximal end of (20), and the inwardly tapered profile of the distal portion (23) tapers from at least the proximal end of (20).

The Examiner further states that the tip of Bazell et al. includes a distal taper from (20) to the distal end of the tip. However, the distally tapering portion (23) of the distal tip is not extending along and adhesively secured to an outer surface of the shaft as required by the embodiment set forth in Applicant's claims. Although the remaining proximal portion (i.e., portion 20) of the distal tip does extend along an outer surface of the shaft, Bazell et al. does not disclose or suggest that portion 20 tapers distally. Rather, Bazell et al. specifically discloses that the flange (20) which extends along an outer

surface of the catheter shaft tapers proximally, from shoulder 21 to the proximal-most edge 22 (or, in an alternative embodiment, that the flange portion (20) has a constant wall thickness). As a result, the distal portion (23) only tapers distally from the shoulder 21 (as set forth at col. 8, line 6 and as shown in Figs. 3 and 4 of Bazell et al.) at the junction between (20) and (23).

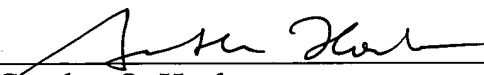
Therefore, irrespective of the location of the proximal-most end of the distal tip of Bazell et al., Bazell et al. does not disclose or suggest a distal tip member having any portion, proximal or distal, which both 1) extends distally along and is adhesively secured to an outer surface of the catheter shaft, and 2) has an outer surface tapering distally, as required by the embodiments set forth in Applicant's claims.

Claims 6-9 were rejected under 35 USC §103(a) as being unpatentable over Bazell et al. (USPN 3,884,242) alone. In light of the non-obviousness of independent claim 1 as argued above, it is respectfully submitted that all claims depending therefrom similarly avoid obviousness.

In light of the above amendments and remarks, applicant earnestly believes the application to be in condition for allowance and respectfully requests that it be passed to issue.

Respectfully submitted,

FULWIDER PATTON LEE & UTECHT, LLP

By: 
Gunther O. Hanke
Registration No. 32,989

PMM:GOH:kst
Howard Hughes Center
6060 Center Drive, Tenth Floor
Los Angeles, CA 90045
Telephone: (310) 824-5555
Facsimile: (310) 824-9696
Customer No. 24201